

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

DIGIMEDIA TECH, LLC,

Plaintiff,

v.

ROKU, INC.,

Defendant.

CIVIL ACTION

NO. 6:23-cv-776

Jury Trial Demanded

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff DigiMedia Tech, LLC (“Plaintiff”) files this Complaint for Patent Infringement and states as follows:

THE PARTIES

1. Plaintiff is a limited liability company organized and existing under the laws of the State of Georgia, having its principal office at 44 Milton Ave., Suite 254, Alpharetta, GA 30009.

2. Defendant Roku, Inc. (“Defendant”) is a corporation organized under the laws of the State of Delaware. Defendant may be served with process through its registered agent, The Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808. Defendant has a regular and established place of business in this district at 9606 N. Mopac Expressway, Suite 400, Austin, TX 78759. Upon information and belief, Defendant has made, used, offered to sell, sold, and/or imported products and services throughout the United States, including in this judicial district.

JURISDICTION AND VENUE

3. This Court has exclusive subject matter jurisdiction over this case pursuant to 28 U.S.C. §§ 1331 and 1338(a) on the grounds that this action arises under the Patent Laws of the United States, 35 U.S.C. § 1 et seq., including, without limitation, 35 U.S.C. §§ 271, 281, 284, and 285.

4. This Court has personal jurisdiction over Defendant, consistent with due process. Defendant is registered to do business in the State of Texas. Defendant also has a place of business in the State of Texas, including at 9606 N. Mopac Expressway, Suite 400, Austin, TX 78759. Further, Defendant has minimum contacts with the State of Texas, and Defendant has purposefully availed itself of the privileges of conducting business in the State of Texas, including through the sale and offer for sale of the accused products and/or services throughout the State of Texas and this judicial district.

5. Venue is proper in this Court as to Defendant pursuant to 28 U.S.C. § 1400(b) on the grounds that Defendant has a regular and established place of business and has committed acts of infringement in this judicial district.

FACTUAL BACKGROUND

The '980 Patent

6. Plaintiff is the owner by assignment of all right, title, and interest in and to United States Patent No. 8,160,980 entitled “Information System Based On Time, Space And Relevance” (“the '980 patent”), including the right to sue for all past, present, and future infringement, which assignment was duly recorded in the USPTO.

7. A true and correct copy of the '980 patent is attached hereto as Exhibit A. The '980 patent is incorporated herein by reference.

8. The application that became the '980 patent was filed on July 11, 2008.

9. The '980 patent issued on April 17, 2012, after a full and fair examination by the USPTO.

10. The '980 patent is and is legally presumed to be valid, enforceable, and directed to patent-eligible subject matter.

11. The elements recited in the claims of the '980 patent were not well-understood, routine, or conventional when the application that became the '980 patent was filed. This is evidenced by the fact that the Patent Examiner allowed the claims of the '980 patent over the art of record.

12. The claims of the '980 patent are directed to technical solutions to the technical problems of both (i) reducing the wait time between requesting common, everyday information and displaying such information to a user and (ii) intelligently generating suggested content for the user from the potentially extensive information based on a user profile. *See* Declaration of David B. Lett, pp. 17-18 (attached hereto as Exhibit A-1). The claimed invention consists of a new concept, function, and format of delivery that provides a level of ease in accessing common information that prior art systems could not provide, including by providing a proxy that handles the collection and parsing of data, a server that gathers usage data from the client, a data mining cluster that allows for user profiling and time, space and relevance analysis, and a set of channels which are periodically updated and upon which automatic suggestions are given based on the user profile. *Id.*

13. Specifically, for example, claims 5, 7, 8, 9, and 10 of the '980 patent claim:

5. An information system, said information system comprising: at least one client that displays information related to a plurality of information channels; a data mining cluster which performs user profiling and time, space and relevance analysis, wherein suggestions are provided to said at least one client based on a user profile and said

time, space, and relevance analysis, and wherein said plurality of information channels are updated based on said suggestions.

7. The system according to claim 5, wherein said at least one client comprises a proxy that collects and parses data.

8. The system according to claim 5, wherein said plurality of information channels are periodically updated.

9. The system according to claim 5, wherein said suggestions are automatically provided to said at least one client.

10. The system according to claim 7, wherein the data collected by the proxy is in extensible markup language (XML) format.

14. The system of asserted claim 5 provides a technical solution to the technical problem of quickly and efficiently providing common information to users. Lett Dec. at pp. 17-18. For example, in one embodiment the “system relies on a local client and a proxy, which can be fully located on the client itself, or rather on a separate server. *Id.* Basic data such as weather forecasts, temperature, news etc. can be displayed to the user. *Id.* By the user's choice of display, a profile can be constructed which suggests to the user alternative channels that match the user's profile but not the user's current selection” (’980 patent 1:60-67); Lett Dec. at p.18.

15. Dependent claim 7 adds the technical limitation that the at least one client comprises a proxy that collects and parses data.

16. Dependent claim 8 adds the technical limitation that the plurality of information channels are periodically updated.

17. Dependent claim 9 adds the technical limitation that suggestions are automatically provided to the at least one client.

18. Dependent Claim 10 adds the technical limitation that the data collected by the proxy be in extensible markup language (XML) format.

19. The specification of the ’980 patent goes on to explain:

The system is a quality of life solution developed in view of residential housing complexes, for supplying information based on time, space and relevance therein. The system is made up of several interdependent subsystems, the client and the supporting infrastructure. The client includes a user-friendly interface and a proxy. The user interface is based in a touch screen placed inside the home to provide quick and easy access to a range of services including the information listed in the former paragraph, and also other functions such as digital photo frame. The proxy pre-fetches information for rapid access. The information provided to the user is based on the user's location and profile. Information is based in channels catalogued in a directory with levels of information and related-location. The usage of the system determines the suggestion of new services to the user.

The supporting infrastructure involves a database collecting information related to the users' usage of the system, a web portal for system administration, and a statistics analyzer to study the information and perform channel suggestions for each user. Additionally, the server can also pre-fetch client information, allowing thin clients with reduced processing power to be used within the proposed system. The database allows analysis of users' usage and to perform profiles leading to suggesting information channels that best fit their profiles.

A portal for system administration is also included allowing the addition, modification or removal of services to/from the system, along with system related parameters, emergency contacts, and location-based events relevant to the user.

The proxy module requests extensible markup language (XML)-based services and converts the provided information to the system format. This allows for seamless integration of different content providers for different information channels. The proxy also registers users' preferences, performs updates of the application and sends statistics to the database. In case of thin clients, the content can be pre-fetched into a server module, named a Content Server, and afterwards requested by the thin client.

The content within the proxy is time, location and user tagged. Information in the information channel is time tagged; the last information retrieved is the most relevant for the moment. When applied, the proxy is also able to fetch information within an information channel related to the client location. Configuration files are used to select the correct parameters to select relevant information within the XML-based service.

Besides XML-based information, the system is also able to fetch and navigate within maps to visualize location based content. The location-

based content appears through the usage of a collection of layers that the user can select based in his or her interests.

The system also incorporates automatic updates to seamlessly integrate new functionalities during the course of the system life cycle. Periodically, the proxy checks the web administration portal for updates and system-related information according to the functionalities integrated within the system.

Statistics are collected within the user interface and sent to the proxy. By this tiered process, the system guarantees that statistical information is not lost due to network failure.

The proxy also integrates contacts, to-do lists and calendar functionalities.

For different processing loads, the proxy may reside entirely on the client, or run partially on a server.

The client has a hierarchical way to access information through different depths of information also reflected in Catalogue Directory stored within the Web Administration Portal. In the first information level, the user can find, for example access to information, services, SOS and Maintenance functionalities. SOS allows for fast access to emergency contacts, and maintenance allows for system customization, namely related location, approval of system services suggestions, themes customization, user identification and screensaver parameters.

Location based information is customized through introduction of the user's location-based reference, namely a landline phone number, a zip code or selection of district, municipality and parish. Moreover, when the screensaver is customized, the system automatically updates media content that will be shown, through the usage of personalized media content service. Upon user's approval of new information channels to be added to the client, the interface is automatically updated to incorporate the suggestions.

For statistical usage, each interaction between the user and the interface is reported to the proxy as an event.

The architecture of the user also uses XML to seamlessly configure the interface and supply relevant information within the interface. This allows for a fast modification of the interface when messages within the platform need to be accommodated.

The Database stores statistics (active/inactive clients, services unavailability, errors, etc).

The database stores users' registrations.

The Web Administration Portal enables addition, modification and removal of new services to be fetched by the proxy and incorporated within the user's interface.

By default, a set of services is integrated within the interface. Afterwards, based in the user's usage of the system further suggestions are performed by the system to the client and submitted for his or her approval.

Emergency contacts and relevant events are also inserted within the Web Administration Portal in order to be fetched by the proxy and shown within the user interface.

Administration statistics are also visualized within the web administration portal.

In the Web Administration Portal, along with the addition, modification and removal of services, the administrator is also able to catalogue each service in a directory, named Catalogue Directory, with levels of information, information related time, user's reference and location-related information. The Catalogue Directory is used within the Statistics Analyzer to suggest the information channels that best fit the user's profile.

Events performed by the user and stored within the database are analyzed. After analysis, new service suggestions for each user are made and stored within the database for future proxy retrieval.

The process by which the user profile is built and suggestions are made is hereinafter described:

The organization of information in each information channel ("channel") shall be executed based on Interaction Time in each information level. Most used items shall be displayed in greater focus, causing the remaining items to be in lesser focus.

E.g., if Economy News are the most accessed in the News Channel then such item will appear in greater focus than the Neighborhood News, as well as the remainder.

The update of the channel disposition shall be done by a content server when the application is updated.

In the Intelligent Suggestions Channel there are suggestions of content according to the user's profile. The user's profile is defined based on every click of the user in the channels.

The Intelligent Suggestions Channel is defined by the following process:

1—Previous Information Cataloguing

All information related to the user, channels and associated hyperlinks is categorized in a hierarchical way.

The user have access to several categories or associated category hierarchy. Geography is a good example. E.g. a user in “Lisbon”, shall implicitly be under “Portugal”, which on its hand is under “Europe”.

The categorization of the channels and associated hyperlinks can be exemplified again by the News Channel. The user can click on “News” and then click on one of the sub-level, which for example can include “Economics” and “International”.

Categorization shall also employ time variables, such as the day of the week on which the click occurred (1-7), if it is a working day, weekend or holiday. It will also employ the date on which the click took place, decomposing the date in the categories “year”, “month”, “day”, “hour” and “minute”.

2—User Profile Definition

The user profile is obtained resorting to Data Mining Clustering Techniques applied to the interaction records and their categories. Clustering is the partitioning of a data set into subsets (clusters), so that the data in each subset is similar within a parameterized distance. Each cluster that is obtained shall stand for a user profile.

As an example, consider a list of records from 3 users whose identifiers (ID) are 174, 175 and 176. The first record in FIG. 4 is from user 175 and was recorded at Jan. 1, 2007 at 10:12 in the path “News”→“Economics”→“Microeconomics”. This hierarchy is represented by the columns “Pag. Level 1”=1=“News”, “Pag. Level 2”=2=“Economics”, and “Pag. Level 3”=1=“Microeconomics”.

The geographic location of the user is represented in a hierarchical way by “User Space 1”=“Africa”, “User Space 2”=“Angola”, “User Space 3”=“Luanda”. When possible, the information in the channel the user accessed is also geographically categorized; in this example it is done by

“Content Space 1”=“Africa”, “Content Space 2”=“Angola”, “Content Space 3”=“Luanda”.

3—Intelligent Suggestions Channel

After defining the Cluster (profile) to which the user belongs, the channels to be suggested to the user are determined by analysis of all the “Pag. Level” categories and Interaction Time.

For each channel path in the cluster a sequence of probabilities is defined in regard to the user being likely to go full depth on a path or not. This allows for a prediction of the probability of the user following a determined hyperlink.

The set of paths for final hyperlinks in a cluster can be represented via a hypergraph. Each cluster record being a hyperedge of the hypergraph. A hypergraph $H=(V,E)$ is a set of vertexes V and a set of hyperedges E , representing a graph extension in which each edge can connect to more than two vertexes.

For example, if $\{p1=“News”, p2=“Economics”, p3 “Microeconomics”\}$ is a record in the cluster, then the hypergraph will include the hyperedge which connects $p1$ to $p2$ and $p3$. Next, a determined weight will be linked to each hyperedge, calculated from the Page Levels probability, and weighted with Interaction Time.

Finally, to determine the suggestion to be submitted to the user, first the cluster to which the user belongs is identified and then the hyperlink (hyperedge) with the greatest relevance (weight) is suggested. If this hyperlink was already one of the most visited by the user, then the next most relevant hyperlink is selected until it is not one of the most relevant to the user.

Suppose that the bold records in FIG. 4 form a cluster. In order to determine the weights, we first calculate the probability of each hyperedge in the cluster and then multiply it by the average of its interaction times, as presented in FIG. 5.

The hyperedge with higher weight is the suggestion to the user.

In this example, the hyperlink suggested to the user is 2-3-1.

The specific element that determines geo-referenced information may vary from provider to provider. For instance, a good implementation can be achieved through zone codes in some areas. The method by which location is provided can vary.

The exemplary embodiments of the present invention, including the processes described above, can be written as computer programs and can be implemented in general-use digital computers that execute the programs using a computer readable recording medium and other types of transmission media. Examples of the computer readable recording medium include magnetic storage media (e.g., ROM, floppy disks, hard disks, etc.), and optical recording media (e.g., CD-ROMs, or DVDs). Other types of transmission media can include carrier waves (e.g., transmission through the Internet).

The foregoing embodiments are merely exemplary and are not to be construed as limiting the present invention. The present teaching can be readily applied to other types of apparatuses.

'980 patent, 2:30-5:59.

20. Figure 4 of the '980 patent, described in the passage above, shows:

Year	Month	Day	Hour	Minutes	Userid	Pag. Level 1	Pag. Level 2	Pag. Level 3	Interaction Time	User Space 1	User Space 2	User Space 3	Content Space 1	Content Space 2	Content Space 3
2007	1	1	10	12	175	1	2	1	1	Africa	Angola	Luanda	Africa	Angola	Luanda
2007	1	1	15	10	176	1	2	3	2	Europe	England	London	Europe	England	London
2007	1	2	16	0	174	2	0	0	1	Europe	Portugal	Lisbon	Europe	Portugal	Lisbon
2007	3	10	11	5	176	2	3	0	1	Europe	England	London			
2007	3	10	16	50	174	2	3	1	3	Europe	Portugal	Lisbon	Europe	Portugal	Lisbon
2007	2	15	20	41	175	2	3	1	2	Africa	Angola	Luanda			
2007	3	10	12	15	176	2	3	1	2	Europe	Portugal	Lisbon	Europe	England	London
2007	4	5	13	10	175	2	3	3	3	Europe	Portugal	Porto			
2007	4	10	12	0	176	2	3	3	1	Europe	Portugal	Lisbon			
2007	3	10	17	15	174	2	3	4	2	Europe	Portugal	Lisbon	Europe	Portugal	Lisbon
2007	3	10	17	20	174	2	3	5	3	Europe	Portugal	Lisbon			
2007	4	5	13	12	175	3	3	2	1	Europe	England	London	Europe	England	London

Figure 4

21. Figure 5 of the '980 patent, described in the passage above, shows:

Pag. Level 1	Pag. Level 2	Pag. Level 3	Probability	average interaction time	Weight
2	3	0	10%	1	10%
2	3	1	30%	2.33	70%
3	3	2	1%	1	1%
2	3	3	20%	2	40%
2	3	4	10%	2	20%
2	3	5	10%	3	30%

Figure 5

22. This combination of functional components and limitations set forth in the asserted claims constitutes patent-eligible subject matter, are not directed to an abstract idea, law

of nature, or natural phenomenon, and contains one or more technical, inventive concepts for accomplishing the goal of quickly and efficiently providing common information to users without unnecessary delay, and providing suggested additional information based on a user's profile. Lett Dec., p. 17-18.

23. The combination of functional components and limitations set forth in the asserted claims of the '980 patent was not well-understood, routine, or conventional at the time of the invention. Lett Dec., p.18-19. This is also evidenced by the decision by the Patent Examiner to allow the asserted claims over the art of record.

24. DigiMedia's technical expert, David B. Lett, has opined that, based on his education, training, and experience, the '980 patent is directed to patent-eligible subject matter under the U.S. Supreme Court's *Alice* framework. Declaration of David B. Lett, pp. 17-23.

25. With regard to step one of the *Alice* analysis, in Mr. Lett's expert opinion, the claims of the '980 Patent in their entirety, the character of these claims as a whole is not directed to excluded subject matter, such as an abstract idea. While the claims might be dissected to identify individual abstract ideas within them, I understand that such dissection is improper. Here, the claims are directed to an improvement in the functioning of prior art computer systems that uses a proxy and a data mining cluster, both of which are specifically described in detail in the '980 Patent's written description. Moreover, it is my expert opinion that, even if, for the sake of argument, the claims are considered to involve patent-ineligible concepts like abstract ideas, the claims as a whole do not attempt to monopolize the entirety of any patent ineligible concept.

Importantly, the patent examiner did not identify any patent eligibility issues during the prosecution of the '980 Patent. Instead, the examiner merely required that the claims be rewritten to include certain elements from certain proposed claims and noted that the prior art of record "neither anticipated nor rendered obvious" those elements. The patentee satisfied the examiner by amending the claims to include the data mining cluster element in all independent claims. The patent issued with no issues whatsoever raised about the eligibility of the claims under Section 101.

... The claims of the '980 Patent all specifically require a data mining cluster, a claim element that was added to all the independent claims in

response to the examiner's office action and that the examiner found was not anticipated or rendered obvious by the prior art of record. This data mining cluster is described at length in the patent, and for example in claim 1 allows for user profiling and time, space and relevance analysis. By implementing the data mining cluster as specifically described in the patent, the claims of the '980 Patent do, in fact, articulate a specific technological improvement in the provision of information to a user. This is a technical solution to a technical problem, and the patent is not merely a "do-it-on-a-computer" patent.

As a result, it is my opinion that the claims, considered as a whole and in light of the specification and file history, are not directed to an abstract idea, but rather are directed to a specific sequence of steps and specifically identified and described components that improve the functionality of a specific type of computer system. Thus, it is my opinion that the claims of the '980 Patent satisfy Alice step one and are not directed to any excluded subject matter.

Lett Dec. pp. 19-21.

26. Moving to step two of the *Alice* analysis, Mr. Lett opined that

Even if the claims of the '980 Patent could be considered to be directed to patent-ineligible subject matter, it is my opinion that the claims would nonetheless remain patentable because analyzing the elements of the claims individually *and* as an ordered combination shows that the claims form an inventive concept that amounts in practice to more than a patent on any ineligible concept itself. Specifically, the inventive concept embodied in the '980 Patent's claims is more than the mere application of an abstract idea using well-understood, routine, and conventional activities.

The file history of the '980 Patent proves this point. The examiner expressly found that the elements added to the originally rejected claims were not anticipated or rendered obvious by the prior art of record. In my opinion, if claim elements are not anticipated or rendered obvious by the prior art, they cannot be well understood, routine, or conventional.

Moreover, the examiner's determination that the claims as amended and issued were patentable indicates that the claims included unconventional steps. It is my opinion that the claims as a whole do, in fact, include unconventional steps in an ordered combination that confine the claims to a particular, useful application of any potentially ineligible concept, and improve prior computer technology.

Further, even if the claims of the '980 Patent are considered to include known, conventional elements, reading the claims as a whole and read in

light of the specification and file history, the claims involve the non-conventional and non-generic arrangement of known conventional elements.

[The New York Court's] Order asserts that the patent does not explain how the claimed improvements to a user's experience are a product of any particular technological innovation. Order at 22. Again, I must respectfully disagree with the Court's Order. First, I understand that the accused infringer must establish patent ineligibility by clear and convincing evidence, and it appears the Court did not apply that burden of proof in its analysis. Second, the '980 Patent does, in fact, explain to a skilled artisan how the claimed invention accomplishes the benefits to the user experience. This description can be found in the specification's description of the claimed data mining cluster and proxy elements outlined above. The Order appears to have been confused by the fact that the programs implementing the claimed invention can be run on general purpose computers. However, computer programs constitute the embodiments of the claimed invention, not the general purpose computer components on which the embodying programs run. See '980 Patent 5:45-49.

For the foregoing reasons, it is my opinion that the claims of the '980 Patent satisfy step two of the *Alice* analytical framework for determining patent eligibility, and form an inventive concept that amounts in practice to more than a patent on any ineligible concept itself.

Lett Dec., pp. 19-23.

27. The expert opinions of Mr. Lett, which are hereby incorporated herein by reference and attached hereto as Exhibit A-1, establish the patentability of the '980 patent as a factual matter. At a minimum, Mr. Lett's expert declaration creates an issue of fact concerning step two of the *Alice* framework by showing, as a factual matter, that the claims of the '980 patent contain an inventive concept that amounts in practice to more than a patent on any ineligible concept.

28. In addition, the significance of the inventiveness of the '980 patent is illustrated by the fact that it has been cited in 11 other patent applications, including the following U.S. patents and published patent applications: US8488011B2, US8493353B2, US9064326B1, US9430876B1, US10341459B2, US8539369B2, US9501140B2, and US20140164404A1. These

public documents and their related prosecution histories are incorporated herein by reference and provide concrete proof that the inventions claimed and disclosed in the '980 patent were not well-understood, routine, or conventional at the time of the invention.

The '568 Patent

29. Plaintiff is the owner by assignment of all right, title, and interest in and to United States Patent No. 6,807,568 entitled "Recipient Selection Of Information To Be Subsequently Delivered" ("the '568 patent"), including the right to sue for all past, present, and future infringement, which assignment was duly recorded in the USPTO.

30. A true and correct copy of the '568 patent is attached hereto as Exhibit B. The '568 patent is incorporated herein by reference.

31. The application that became the '568 patent was filed on July 27, 2000.

32. The '568 patent issued on October 19, 2004, after a full and fair examination by the USPTO.

33. The '568 patent is and is legally presumed to be valid, enforceable, and directed to patent-eligible subject matter.

34. The elements recited in the claims of the '568 patent were not well-understood, routine, or conventional when the application that became the '568 patent was filed.

35. The technical problems which the '568 Patent addresses includes the following:

Currently, when it is desired to watch a TV program, the viewer is at the mercy of the content providers as to what that viewer watches and at what time. This is changing now that digital recorders, such as the TIVO system from Philips, can record many hours of TV programs thereby allowing viewers to delay watching broadcasts for a period of time by recording such broadcasts for later viewing. Such systems also allow users to select programs to be aired in the future and to record the selected shows. These systems also allow users to select topics and the system selects the shows that match these selected topics. Such systems work well, but suffer from

the fact that they also are dependent upon the preselection of content by the content provider. (1:14-26)

This same problem exists when users are trying to obtain information from the Internet. The user can only gain access to information if that information exists on the Internet at the time that the information is sought. However, even if the information existed on the Internet at that time, obtaining that information, even using the very sophisticated tools available today, is not trivial. For example, assume that a user desires to obtain tickets to see a certain play (or concert) or to see a certain performer when and if that play, concert or performer is next in town. Today, the user would access the Internet and look for the name of the play or the name of the performer. If there was a scheduled performance, the user might, depending upon his/her skill (and patience), find it. But if there was nothing scheduled (or contemplated) then the user would come away (usually after spending considerable time looking) with nothing. (1:35-50)

36. The claims for the '568 patent are directed to technical solutions to the technical problem of locating and accessing information content desired by requesting users, where the information content is controlled and held by information providers. One of the reasons this is important is that a network providing service to subscribers may not know either (i) if the user has rights to access the information content held by information providers and accessed via the network or (ii) if the information provider holds the requested information content. Since a network prefers easy access to information content desired by users, but doesn't know upon receiving a request by users if the information content is available to the users, the problem calls for technical solutions. The '568 patent discloses and claims such technical solutions. For example, the '568 patent recognized that user requests for information could be collected by a network and then forwarded to information providers, where the information providers can determine if they have control over the information. Upon successfully confirming the conditions for user access, the network can deliver information that is under control of the information provider to the requesting user.

37. The '568 Patent describes the technical solution to this problem in detail as follows:

Turning now to FIG. 1, there is shown system **10**, which has user input device **11** which could, for example, be a remote control into the TV set or digital recorder or a computer or any other input device, such as a wireless phone. The input could be by voice command, using, for example, a voice recognition system. In the TV environment, the input could be to digital recorder **12**, such as, for example, the aforementioned TIVO recorder provided by Philips. Such a device would typically have processor **1201** and memory **1202** and would operate to receive input signals from a variety of sources such as, for example inputs **1203**. This data can be in analog or digital form and would be stored in a memory. In the illustrative embodiment, analog signals are digitized by recorder **12** and stored in memory **1202**. Information stored in memory **1202** is made available to display **13** on command from the user, or, alternatively, under control of the information provider.

Recorder **12** is designed to-interact with a remote location **14** either by phone connection, satellite or by any other mechanism, whether wireless or wireline, to exchange information pertaining to the lineup on the various channels. In this manner the user, using input device **11**, may determine what is available today, tomorrow or sometime in the future. This then allows the user to select, (and set for recording if desired) certain programs which will become available over input **1203** at future times. This information is updated periodically via a connection made between recorder **12** and remote location **14**, thereby assuring recorder **12** that it has the latest program information.

User **11** may specify to recorder **12**, usually in the form of an interactive session between user device **11** and recorder **12**, that the user desires to watch certain programs by name or type, which programs will occur in the future. Recorder **12** then monitors the information received from remote location **14**, then recorder **12** will monitor the information and, whenever an input program arrives having that artist, the recorder will proceed to record the program.

The problem at this point, however, is that if recorder **12** has no information pertaining to future programs, movies, artists, etc., then the interactive session between user **11** and recorder **12** will not achieve the desired result, i.e., the scheduling of a desired program.

In the embodiment shown in FIG. 1 user **11** could input to recorder **12** the desired movie, series, concept, artist or any other desired information. This information then is provided from recorder **12** to remote location **14**, for

example, over the periodic connection between the two. Remote location **14** then stores the information pertaining to user **11**. Location **14** then accesses data base **15**, which could^[SEP]be local to remote location **14** or remote therefrom. This access can either be direct, via connection **1204**, or it could^[SEP]be through Internet **100** via connections **1205**, **1206**. (4:26-5:15)

38. Specifically, for example, claims 1, 2, 4, 6, and 12 of the '568 patent claim:

1. A method of delivering information to a requesting user, said method comprising the steps of:

making a request available to information providers by a user that said user desires certain information content;

accessing said request by any information provider other than said user and wherein said accessing is under control of said accessing information provider independent from said user;

determining by said information provider whether said information provider has control of information content that said user desires; and

under at least partial control of said determining step delivering said information content which is under the control of said information provider and which information content is desired by said user.

2. The method of claim 1 wherein said information provider accesses said information via the Internet.

4. The method of claim 1 wherein said making a request step includes providing user information to control the accessing of said requests by third parties.

6. The method of claim 1 wherein said delivering step includes the step of: interacting between said information provider and said user as to the nature of the information to be delivered.

12. The method of claim 1 wherein said information to be delivered is entertainment media.

39. The inventions recited in the asserted claims of the '568 patent, including the claimed sequence of steps, provide a technical solution to the technical problem of locating and accessing information content desired by requesting users, where the information content is controlled and held by information providers.

40. The claimed inventions constitute patent-eligible subject matter, are not directed to an abstract idea, law of nature, or natural phenomenon, and contain one or more inventive concepts for accomplishing the goal of locating and accessing information content desired by requesting users, where the information content is controlled and held by information providers.

41. This claimed inventions were not well-understood, routine, or conventional at the time of the invention. This is evidenced by the USPTO Examiner's decision to allow the claims of the '568 patent over the art of record.

42. The significance of the inventiveness of the '568 patent is illustrated by the fact that it has been cited in 20 other patent applications, including the following U.S. patents and published patent applications: US20020152257A1, US20040064507A1, US20050010498A1, US20090144385A1, US20090315958A1, US20040268403A1, US8813136B2, US20080235188A1, US8732778B1, US8949870B2, US9532007B2, US20100037248A1, US8516533B2, US9659263B2, US20100205628A1, and US10779032B2. These public documents and their related prosecution histories are incorporated herein by reference and provide concrete proof that the inventions claimed and disclosed in the '568 patent were not well-understood, routine, or conventional at the time of the invention.

The '220 Patent

43. Plaintiff is the owner by assignment of all right, title, and interest in and to United States Patent No. 6,684,220 entitled "Method and System for Automatic Information Exchange" ("the '220 patent"), including the right to sue for all past, present, and future infringement, which assignment was duly recorded in the USPTO.

44. A true and correct copy of the '220 patent is attached hereto as Exhibit C. The '220 patent is incorporated herein by reference.

45. The application that became the '220 patent was filed on September 20, 2000.

46. The '220 patent issued on January 27, 2004, after a full and fair examination by the USPTO.

47. The '220 patent is and is legally presumed to be valid, enforceable and directed to patent eligible subject matter.

48. The elements recited in the asserted claims of the '220 patent were not well-understood, routine, or conventional when the application that became the '220 patent was filed. This is demonstrated, for example, by the decision of the Patent Examiner to allow the claims of the '220 patent over the art of record.

49. The claims the '220 patent are directed to technical solutions to the technical problem of a server system conducting automated information exchanges. One of the reasons this is important is to support automated and accurate server-generated responses to customer inquiries in online chat systems. With accurate and automated information exchange, routine customer inquiries can be answered directly by a server system. The '220 patent discloses and claims such technical solutions for automated information exchange. For example, the '220 patent couples an information source to a processor that stores a data model. The '220 patent discloses a loading engine for automatically creating object links between input variables and output variables for the data objects in the data model. Consequently, the technology in the '220 patent enables automated and accurate online responses from a server system to customer support inquiries without requiring answers from customer support representatives.

50. For example, asserted claim 10 of the '220 patent claims:

10. A method for automatic information exchange, comprising:

retrieving a model from an information source, the model having a plurality of objects, each of the plurality of objects having an input variable and an output variable;

automatically identifying the input variables and the output variables of each of the plurality of objects; and

automatically creating object links between the corresponding input variables and output variables of each of the plurality of objects.

51. The sequence of steps set forth in the asserted claim of the '220 patent provide a technical solution to the technical problem of a server system conducting automated information.

52. The claimed sequence of steps set forth in the '220 patent constitutes patent-eligible subject matter, is not directed to an abstract idea, law of nature, or natural phenomenon, and contains one or more inventive concepts for accomplishing the goal of accurate and automated information exchange.

53. The significance of the inventiveness of the '220 patent is illustrated by the fact that it has been cited in six other patent applications, including the following U.S. patents and published patent applications: US20060010423A1, US20060010419A1, US20060136497A1, EP1674953A1, and US20140373034A1. These public documents and their related prosecution histories are incorporated herein by reference and provide concrete proof that the inventions claimed and disclosed in the '220 patent were not well-understood, routine, or conventional at the time of the invention.

COUNT I – INFRINGEMENT OF THE '980 PATENT

54. Plaintiff realleges and incorporates by reference the allegations set forth above, as if set forth verbatim herein.

55. Defendant has been and now is making, using, selling, offering for sale, and/or importing products that incorporate one or more of the inventions claimed in the '980 patent.

56. Defendant directly infringes one or more claims of the '980 patent.

57. For example, Defendant infringes at least claims 5 and 7-9 of the '980 patent, either literally or under the doctrine of equivalents, in connection with Defendant's Roku

streaming devices with “What to Watch” and similar products, as detailed in the preliminary claim chart attached hereto as Exhibit D and incorporated herein by reference.

58. Moreover, after receiving notice of the ’980 patent and its infringement thereof no later than the service of this complaint, on information and belief, Defendant continues to induce third-parties (e.g., retailers and end users) to directly infringe the ’980 patent, including, for example, by distributing the above-referenced products and encouraging others to sell those products or use them in a way known to infringe when used in their customary and intended manner as set forth in Exhibit D.

59. Defendant’s infringing activities are and have been without authority or license under the ’980 patent.

60. Plaintiff is entitled to recover damages for Defendant’s infringement, which damages cannot be less than a reasonable royalty.

COUNT II – INFRINGEMENT OF THE ’568 PATENT

61. Plaintiff realleges and incorporates by reference the allegations set forth above, as if set forth verbatim herein.

62. Defendant has made, used, sold, offered for sale, and/or imported products that incorporate one or more of the inventions claimed in the ’568 patent.

63. For example, Defendant has infringed at least claim 1 of the ’568 patent, either literally or under the doctrine of equivalents, in connection with Defendant’s systems and processes for adding streaming channels and similar products, as detailed in the preliminary claim chart attached hereto as Exhibit E and incorporated herein by reference.

64. On information and belief, Defendant has performed all steps of this claim or, alternatively, to the extent a third party performed any step, Defendant conditioned the third party’s use of the functionality of the accused instrumentalities described herein on the

performance of that step as disclosed in Exhibit E. The accused functionality relates to a process for publishing channels as set forth in Exhibit E. For example, on information and belief, a third party could not use the functionality of the accused instrumentality as described in Exhibit E without performance of the steps recited in claim 1 of the '568 patent. Defendant also controlled the manner and/or timing of the functionality described in Exhibit E. In other words, for a third party to utilize the functionality described in Exhibit E, the steps of claim 1 of the '568 patent had to be performed in the manner described in Exhibit E. Otherwise, the functionality described in Exhibit E (and the corresponding benefit) described in Exhibit E would not have been available to third parties.

65. Defendant's infringing activities have been without authority or license under the '568 patent.

66. Plaintiff has been damaged by Defendant's infringement of the '568 patent, and Plaintiff is entitled to recover damages for Defendant's infringement, which damages cannot be less than a reasonable royalty.

COUNT III – INFRINGEMENT OF THE '220 PATENT

67. Plaintiff realleges and incorporates by reference the allegations set forth above, as if set forth verbatim herein.

68. Defendant has made, used, sold, offered for sale, and/or imported products that incorporate one or more of the inventions claimed in the '220 patent.

69. For example, Defendant has infringed at least claim 10 of the '220 patent, either literally or under the doctrine of equivalents, in connection with Defendant's Roku developer tools and similar products, as detailed in the preliminary claim chart attached hereto as Exhibit F and incorporated herein by reference.

70. Defendant's infringing activities have been without authority or license under the '220 patent.

71. Plaintiff has been damaged by Defendant's infringement of the '220 patent, and Plaintiff is entitled to recover damages for Defendant's infringement, which damages cannot be less than a reasonable royalty.

JURY DEMAND

Plaintiff demands a trial by jury of all issues so triable.

PRAYER FOR RELIEF

Plaintiff respectfully requests that the Court find in its favor and against Defendant, and that the Court grant Plaintiff the following relief:

- A. Entry of judgment that Defendant has infringed one or more claims of the '980 patent,
- B. Entry of judgment that Defendant has infringed one or more claims of the '568 patent,
- C. Entry of judgment that Defendant has infringed one or more claims of the '220 patent,
- D. Damages in an amount to be determined at trial for Defendant's infringement, which amount cannot be less than a reasonable royalty, and an accounting of all infringing acts, including but not limited to those acts not presented at trial,
- E. A determination that this case is exceptional, and an award of attorney's fees,
- F. All costs of this action,
- G. Pre-judgment and post-judgment interest on the damages assessed, and
- H. Such other and further relief, both at law and in equity, to which Plaintiff may be entitled and which the Court deems just and proper.

This 14th day of November, 2023.

/s/ Cortney S. Alexander

Cortney S. Alexander

cortneyalexander@kentrisley.com

Tel: (404) 855-3867

Fax: (770) 462-3299

KENT & RISLEY LLC

5755 N Point Pkwy Ste 57

Alpharetta, GA 30022

Attorneys for Plaintiff